Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Original) A balloon-expandable medical stent, comprising:

a generally tubular body including an alloy having Ti at about 20 weight percent or more and at least one of Zr, Ta, or Mo, the alloy having a yield strength of about 45 ksi or more, a magnetic susceptibility of about +1 or less, and a mass absorption coefficient of about 1.9 cm^2/g or more.

2. (Original) The stent of claim 1 wherein the alloy has a UTS of about 90 ksi or more and the percent tensile elongation is about 40 or more.

3. (Original) The stent of claim 1 wherein the yield strength is about 50 ksi or greater, the percent strength to peak load is about 30 or greater, the UTS is about 90 ksi or greater, and the percent strength to fracture is about 40 or greater.

4. (Original) The stent of claim 1 wherein the magnetic susceptibility is about 3.5×10^{-3} or less.

5. (Original) The stent of claim 1 wherein the mass absorption coefficient is about 2.9 cm^2/g or less.

6. (Original) The stent of claim 1 wherein the alloy includes about 50 weight percent Ti or greater.

7. (Original) The stent of claim 1 wherein the alloy includes 20 weight percent or greater of Zr, Ta or Mo or a combination thereof.

8. (Original) The stent of claim 1 wherein the alloy includes 80 weight percent or less of Zr, Ta or Mo or a combination thereof.

9. (Original) The stent of claim 1 wherein the alloy includes 10 weight percent or more of Zr.

10. (Original) The stent of claim 1 wherein the alloy includes about 50 weight percent of Zr.

11. (Original) The stent of claim 1 wherein the alloy includes about 40 weight percent or more of Ta.

12. (Original) The stent of claim 1 wherein the alloy includes about 75 weight percent or less of Ta.

13. (Original) The stent of claim 1 wherein the alloy includes about 3 weight percent or more of Mo.

14. (Original) The stent of claim 1 wherein the alloy includes about 20 weight percent or less of Mo.

15. (Original) The stent of claim 1 wherein the alloy is Ti-Ta, Ti-Mo, Ti-Zr, Ti-Ta-Mo, Ti-Ta-Zr, Ti-Ta-Zr-Mo, Ti-Zr-Mo, Ti 6A1-4V-Ta, Ti 6A1-4V-Mo, Ti 6A1-4V-Zr, Ti 6A1-4V-Ta-Mo, Ti 6A1-4V-Ta-Zr, Ti 6A1-4V-Ta-Zr-Mo, Ti 6A1-4V-Zr-Mo, Ti-13Nb-13Zr, Ti-

13Nb-13Zr-Mo, Ti-13Nb-13Zr-Ta, Ti-8A1-1Mo-1V, Ti-8A1-1Mo-1V-Zr, Ti-8A1-1Mo-1V-Ta, Ti-6A1-2Nb-1Ta-0.8Mo, or Ti-6A1-2Nb-0.8Mo-Zr.

16. (Original) The stent of claim 1 wherein the alloy of CP titanium, Ti-6A1-4V, or Ti-6A1-4V ELI alloyed with 40 to 70 weight percent of Ta or 25 to 50 weight percent of Zr.

17. (Original) The stent of claim 16 where the alloy includes 5 to 20 weight percent of Mo.

18. (Original) The stent of claim 1 wherein the alloy is selected from:

CP Titanium alloyed with:	Ti-6A1-4V ELI alloyed with:
43 weight % Ta	43 weight % Ta
69 weight % Ta	69 weight % Ta
25 weight % Ta	25 weight % Ta
49 weight % Zr	49 weight % Zr
43 weight % Ta + 5% Mo	43 weight % Ta + 5% Mo
69 weight % Ta + 5% Mo	69 weight % Ta + 5% Mo
25 weight % Zr + 5% Mo	25 weight % Zr + 5% Mo
49 weight % Zr + 5% Mo	49 weight % Zr + 5% Mo
43 weight % Ta + 10% Mo	43 weight % Ta + 10% Mo
69 weight % Ta + 10% Mo	69 weight % Ta + 10% Mo
25 weight % Zr + 10% Mo	25 weight % Zr + 10% Mo
49 weight % Zr + 10% Mo	49 weight % Zr + 10% Mo
22 weight % Ta + 13% Mo	22 weight % Ta + 13% Mo
35 weight % Ta + 25% Mo	35 weight % Ta + 25% Mo

19. (Original) The stent of claim 1 wherein the tubular body includes wall portions having a thickness of about 0.0015 inch to about 0.0150 inch.

20. (Original) The stent of claim 1 wherein the tubular body includes a therapeutic agent.

21. (Original) A system including a catheter for delivery into a body lumen, the catheter including an expandable member and a stent as described in claim 1 disposable over the expandable member, the expandable member expandable to a maximum diameter of about 1.5 mm to about 14 mm.

22. (Original) An implantable medical device, comprising:

an alloy having Ti at about 20 weight percent or more and at least one of Zr, Ta, or Mo, the alloy having a yield strength of about 45 ksi or more, a magnetic susceptibility of about +1 or less, and a mass absorption coefficient of about 1.9 cm^2/g or more, the medical device selected from a filter, a guidewire, a catheter, a needle, a biopsy needle, a staple, and a cannula.

23. (Original) A method of forming a stent, comprising:

providing an alloy including Ti of about 20 weight percent or more and at least one additive selected from the group consisting of Zr, Ta and Mo by:

contacting solid aliquots of a titanium component selected from Ti or a Ti-containing alloy, and the additive,

heating the aliquot after the contacting,

mechanically working the aliquots after contacting by forging, extrusion, drawing or rolling,

melting the aliquots,

forming a first mass,

forming a tube including the alloy, and

incorporating the tube into a stent.

24. (Original) The method of claim 23 wherein the contacting includes providing a body composed of the titanium component or the additive including voids and inserting into the voids the additive or titanium component.

25. (Original) The method of claim 24 wherein the body is a rod and the voids are lumens in the rod.

26. (Original) The method of claim 25 wherein the lumens are elongate lumens substantially arranged along the axis of the rod.

27. (Original) The method of any one of claims 24 and 26 wherein the body is formed of the titanium component.

28. (Original) The method of claim 27 wherein the additive is the form of a particulate or a solid wire.

29. (Original) The method of claim 23 wherein the heating includes causing diffusion between the titanium component and the additive.

30. (Original) The method of claim 29 comprising heating to a temperature within ±10% of the melting point of the titanium component.

31. (Currently Amended) The method of claim ~~31~~ 23 comprising heating after the mechanical working.

32. (Original) The method of claim 23 comprising:

after forming the first mass, contacting the first mass with further additive, melting the first mass in contact with the further aliquot, and forming a second mass having a greater amount of additive.

33. (Original) The method of claim 32 comprising mechanically working or heating the first mass in contact with the further aliquot, prior to melting.

34. (Original) The method of claims 23 comprising:
melting by vacuum arc remelting, electron beam, plasma or vacuum induction melting.

35. (Original) The method of claim 23 comprising forming the first mass having a volume of about 6.5 in^3 or less.

36. (Original) The method of claim 35 where the first mass is in the form of a cylinder.

37. (Original) The method of claim 23 wherein forming the tube includes forming a tube from the first mass by drawing or sheet-rolling.

38. (Original) The method of claim 23 wherein incorporating the tube into a stent includes machining the tube to include apertures in the wall of the tube.

39. (Currently Amended) The method of claim 23 wherein the stent is a vascular, balloon-expandable stent.

40. (Original) A method of forming a medical device, comprising:

providing a metal alloy of multiple components of elements or alloys, including a first component and a second component having a melting point difference of about 150°C or more by contacting solid aliquots of the first component and the second component,

heating and/or mechanically working the aliquots after contacting to form a first mass,

melting the first mass,

forming a second mass from the first mass, and

incorporating the alloy into a medical device.